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AUSTRALIA

Patents Act 1990

ARISTOCRAT LEISURE INDUSTRIES PTY LTD

PROVISIONAL SPECIFICATION

Invention Title:

Progressive jackpot game

The invention is described in the following statement:

Progressive jackpot game

Introduction

The present invention relates to apparatus for use with a system of linked poker machines and in particular the apparatus provides an improved mystery jackpot mechanism for use with such a poker machine system.

Background of the Invention

Many schemes have been devised in the past to induce players to play slot machines including schemes such as specifying periods during which jackpot prizes are increased or bonus jackpots paid. Other schemes involve awarding an additional prize to a first player to achieve a predetermined combination on a poker machine after a given point in time. These methods, while effective, add to club overheads because of the need for additional staff to ensure that the scheme is operated smoothly. More recently, with the advent of poker machines linked through electrical networks it has been possible to automatically generate jackpot prizes on the basis of information received from the machines being played which are connected to the system and one such prior art arrangement, commonly known as "Cashcade", counts turnover (or games played) on all machines in the network, increments a prize value in accordance with the turnover (or number of games played) and pays a mystery jackpot prize when the count reaches some predetermined and randomly selected number. In a more recent prior art arrangement, each game played on each machine in a gaming system is allocated a randomly selected number and the prize is awarded to a machine when the game number it is allocated matches a preselected random number.

In another recent prior art arrangement, the winning machine is selected by randomly selecting a number at a point in time and decrementing the number as games played on the system are counted until the number is decremented to zero at which time the game (or associated machine) causing the final decrement is awarded the jackpot.

With each of these prior art arrangements there is a serious disadvantage in that the player betting a single token per line, is just as likely to achieve a progressive jackpot as the player playing multiple tokens per line. This has the effect of encouraging players playing for the progressive bonus to bet in single tokens, rather than betting multiple tokens per game.

Progressive jackpot games have traditionally been popular in Casinos. Their main attraction has undoubtedly been their massive jackpot amounts, which are accessible to players on all gambling budgets. However, in their conventional format these games have obvious limitations:

(i) Standard symbol-based triggers (eg five 7's) are perceived by many players as being unattainable. These triggers for the grand jackpot are never seen by most players. Anecdotal evidence suggests that many players are realistically playing for the lesser jackpots on multilevel progressives (eg major, minor and mini jackpots). The increasing popularity of Cashcade jackpots supports this argument;

(ii) Due to the increasing demand of players for a more complex and diverse game range, conventional progressive games with symbol-based triggers have become superseded.

(iii) Typically, it would be expected that as more coins are bet per line the return to player (RTP) would increase. In fact the reverse is true, because the player playing more coins is at a relative disadvantage as far as RTP is concerned. Lets say the start-up amount for a progressive jackpot is $10000. A player who is playing 1 credit/ 1 line gets $10000 for each credit played, whereas a player playing 5 credits/ 1 line only gets $2000 for each credit played. Hence a law of diminishing returns. So, the smart player who gambles for the progressive only will always cover all playlines, but will only bet 1 credit per line because the progressive amount paid is the same irrespective of the bet.

It could be expected therefore, that turnover would be significantly decreased without any multiplication of bet per line. Empirical data suggests that as much as 55% of total turnover is obtained from bets higher than 1 credit per line on $0.05 20 line games.

These arrangements have been in use in the State of New South Wales and in other jurisdictions for a considerable period of time, however, as with other aspects of slot machine games, players become bored with such arrangements and new and more innovative schemes become necessary in order to stimulate player interest.

Summary of the Invention

According to a first aspect, the present invention provides a random prize awarding system associated with one or more gaming consoles each of which includes signal output means arranged to produce an output signal in

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Summary of the Invention

According to a first aspect, the present invention provides a random prize awarding system associated with one or more gaming consoles each of which includes signal output means arranged to produce an output signal in

response to operation of the respective console, each of the one or more gaming consoles being arranged to play a first game or a second game, the first game being a standard game normally offered on the machine and the second game being a jackpot game offered for play when the player has achieved a trigger condition, the system including turnover monitoring means associated with each console to record the turnover of the console starting from a given point in time; and trigger means arranged to initiate an instance of the second game when the turnover reaches a predetermined value.

Preferably, the second game is a simplified game having a higher probability of success than the first game. In a particularly preferred embodiment, the second game provides five reels with four different symbols on each reel and a jackpot is activated if after spinning the reels the same symbol appears on the win line of each reel. The symbols may be of equal value and equally weighted (ie, same number of instances) on each reel or alternatively, the prizes might be of different values (eg: different fractions of the pool) and the symbols have different weightings on at least one reel.

Preferably, the prize awarded in a jackpot game by the system of the present invention, is a monetary amount the value of which is incremented with each game played on each gaming machine or console in the system. Alternatively, the incrementation can take place on a per token bet basis.

Where used above, the term 'console' is used to indicate a gaming machine, a gaming terminal or other device arranged to be connected to a communications system and to provide a user gaming interface. In the following description, examples are give which are applicable to traditional slot machines, however the invention should be taken to include gaming systems which include user interfaces other than traditional slot machines.

Brief Description of the Drawings

Embodiments of the invention will now be described by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a block diagram of a network of electronic gaming machines to which a mystery jackpot controller according to the present invention is connected; and

Figure 2 is a flow chart showing a game arrangement according to the invention.

Detailed Description of the Preferred Embodiments

In a preferred embodiment of the invention, a new progressive combination provides the Casino operator with a far higher degree of flexibility. This Link Progressive System is innovative in it's progressive approach, and intuitively seeks to "adrenalize" the punter. Unlike conventional symbol-based progressive combinations, the jackpots are won from a second screen feature. The second screen feature is triggered randomly as a function of turnover. A second set of reel strips appears and a "spin and hold" feature game commences. When or if 5 symbols of the same type appear in the window, then the corresponding progressive jackpot is won. Of course it will be the mini and minor jackpots which attract the majority of hits. These are typically rapid jackpots with high increment rates and provide extra incentive to keep player interest on these machines.

Progressive jackpots in this format would have obvious advantages to both player and Casino operator:

(i) The relative disadvantage of the multiplier game in progressive jackpots is eliminated. Playing 20 lines/ 10 credits bet per line will produce ten times as many hits into the second screen progressive feature than 20 lines/ 1 credit bet per line. This is due to the use of a random trigger as a function of turnover, instead of using conventional symbol-based triggers;

(ii) The ability to develop a Hyperlink using any existing game combination within an installation, once the game has been bundled with the Hyperlink progressive feature game. This will allow for the linking of combinations between platforms, denominations, different number of lines etc. Progressive games can now be developed using combinations as the base game which were previously unsuitable for Link Progressive Systems, which will compete with the appeal of the latest games on the market. This also addresses the problems of developing progressive combinations which will always be limited by the need for common triggers. New variations of these games allow for generous progressive contributions (eg 75% base games with 20% progressive contributions);

(iii) The introduction of a feature game which produces what can only be described as the "adrenaline rush" - the gambler's natural high. This psyche has been critical to the success of the most successful prior art games.

(iv) Preferably, when a second screen progressive feature is triggered, a bell sound announces to all of the surrounding players that a

possible grand jackpot is about to be played for and is designed so that everyone can share in the experience of a progressive win. The rationale behind this, is that progressive jackpots are only ever seen after the prize has been won. Anecdotal evidence of players watching feature games being played in Australian Casinos, suggests the drawing power of such games is very real.

Referring to Figure 1 a plurality of electronic gaming consoles 10 are connected to a network 11, to which a mystery jackpot controller 12 and display means 13 are also connected.

Each of the electronic gaming consoles 10 are provided with a network interface arranged to provide a signal onto the network 11 on each occurrence of an operation of a respective console and the jackpot controller 12 is arranged to receive each of the console operation signals and to increment the value of a random jackpot prize on the occurrence of each of these operation signals.

A flow chart for a prize awarding algorithm is illustrated in Figure 2.

Referring to the algorithm of Figure 2, machine contributions go into the prize pool as with known prior art jackpot systems, while the overhead display shows the incrementing prize value.

In step 20 the controller sets up a turnover value to be used as a trigger value for each console. This value may be fixed for the system or may be varied from time to time by the system or system operator. Every game that is played is reported (step 22) to the controller which not only allocates a contribution to the prize pool but also operates the console's turnover register (step 23). The turnover value accumulated by the console is then tested (step 24) and if this value matches the preset trigger value, the player is given an opportunity to play a second screen jackpot game (step 26), but first, the turnover counter is reset. (step 25). If a jackpot is awarded as a result of the second screen game, the winning machine is locked up (step 28) and the controller awaits an indication that the prize has been paid and the machine unlocked (step 29) before returning to step 22. If the turnover value does not match then there is no jackpot game awarded for that game and the controller returns to step 22 and waits for the next console to report operation.

As the time between jackpot game awards is related to turnover, the number of jackpot games played by a player and hence their chance of winning is directly related to the size of each bet on each game played.

(1) All machines on the link have a 2nd screen game, be it an animation game or a second set of reel strips.

(2) The link has a number of progressive meters (up to 8). All progressives may be linked.

(3) The second screen game is activated when a machine has reached a predetermined dollar turnover. This is only known to the machine or a controller. For example, the second screen is activated when (an average of) $150 has been turned over. This means that whenever $0 to $300 has been turned over, the second screen appears. The benefit of activating the second screen on turnover enables mixed denomination on the link for the first time. The second screen gives the player the chance of winning one of the 4 progressives if a certain outcome appears. For example, a new set of reel strips appear with only 4 different symbols: Jackpot 1, Jackpot 2, Jackpot 3, Jackpot 4. The first time 5 of the same appear on the centre line the stated progressive is won.

(4) Another advantage of awarding a progressive prize won in a second screen, is that it can be applied to any game.

It will be appreciated by persons skilled in the art that numerous variations and/or modifications may be made to the invention as shown in the specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive.

DATED this eighth day of July 1997

ARISTOCRAT LEISURE INDUSTRIES PTY LTD
Patent Attorneys for the Applicant:

F.B. RICE & CO.

ABSTRACT

A plurality of electronic gaming machines 10 are connected to a network 11, to which a link progressive jackpot controller 12 and display means 13 are also connected. Each of the electronic gaming machines 10 are provided with a network interface arranged to provide a signal onto the network 11 on each occurrence of an operation of a respective machine and the jackpot controller 12 is arranged to receive each of the machine operation signals and to increment the value of a random jackpot prize on the occurrence of each of these operation signals. The gaming machine 10 or controller 12 also tracks turnover on each machine and when any machine reaches a turnover value equal to a trigger turnover value, the particular machine is switched into a second screen mode in which a jackpot game is played for the incremented jackpot prize.

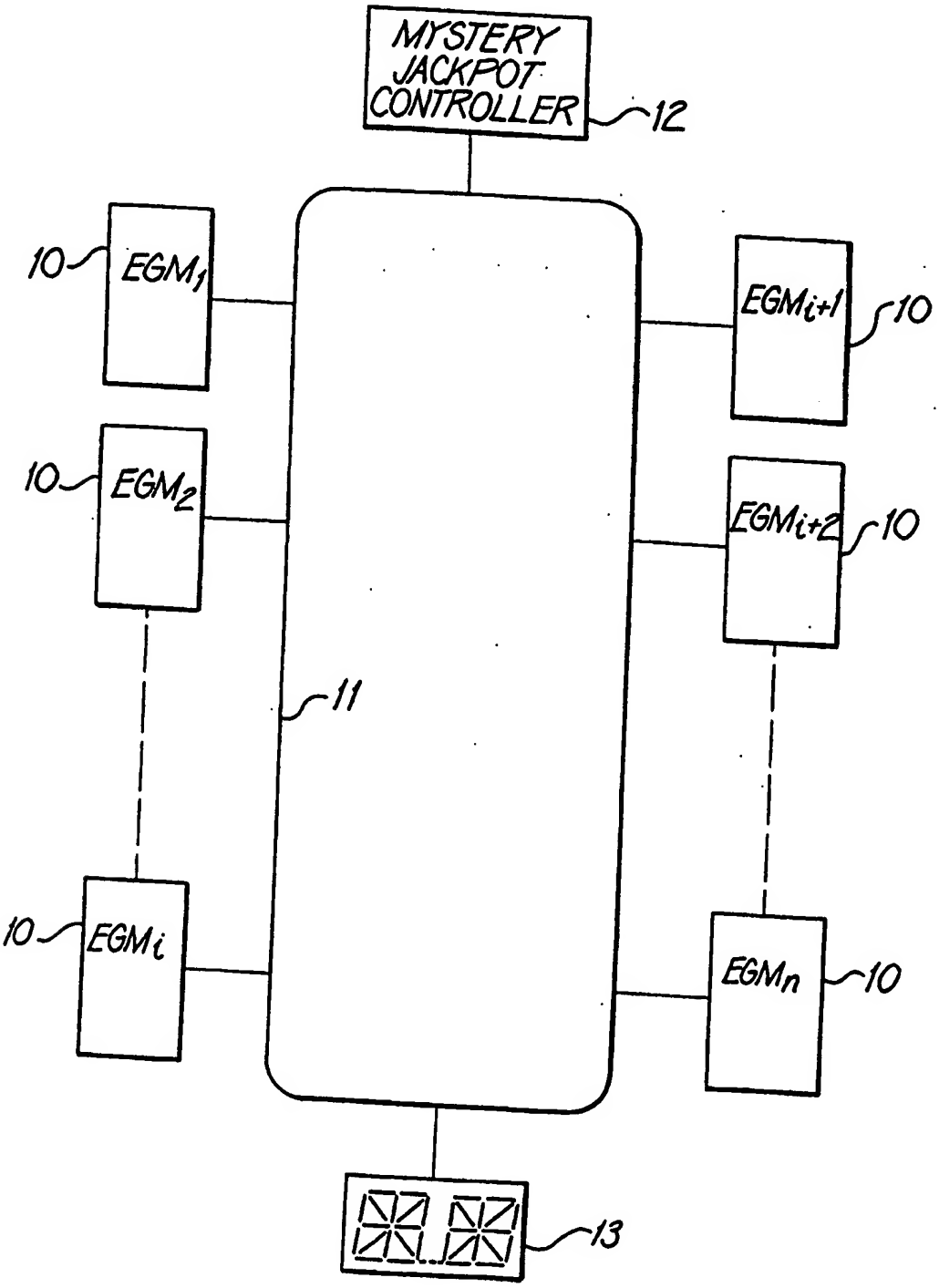
MYSTERY JACKPOT CONTROLLER
12
10
EGM1
EGMi+1
10
10
EGM2
EGMi+2
10
11
10
EGMi
EGMn
10
13

FIG. 1

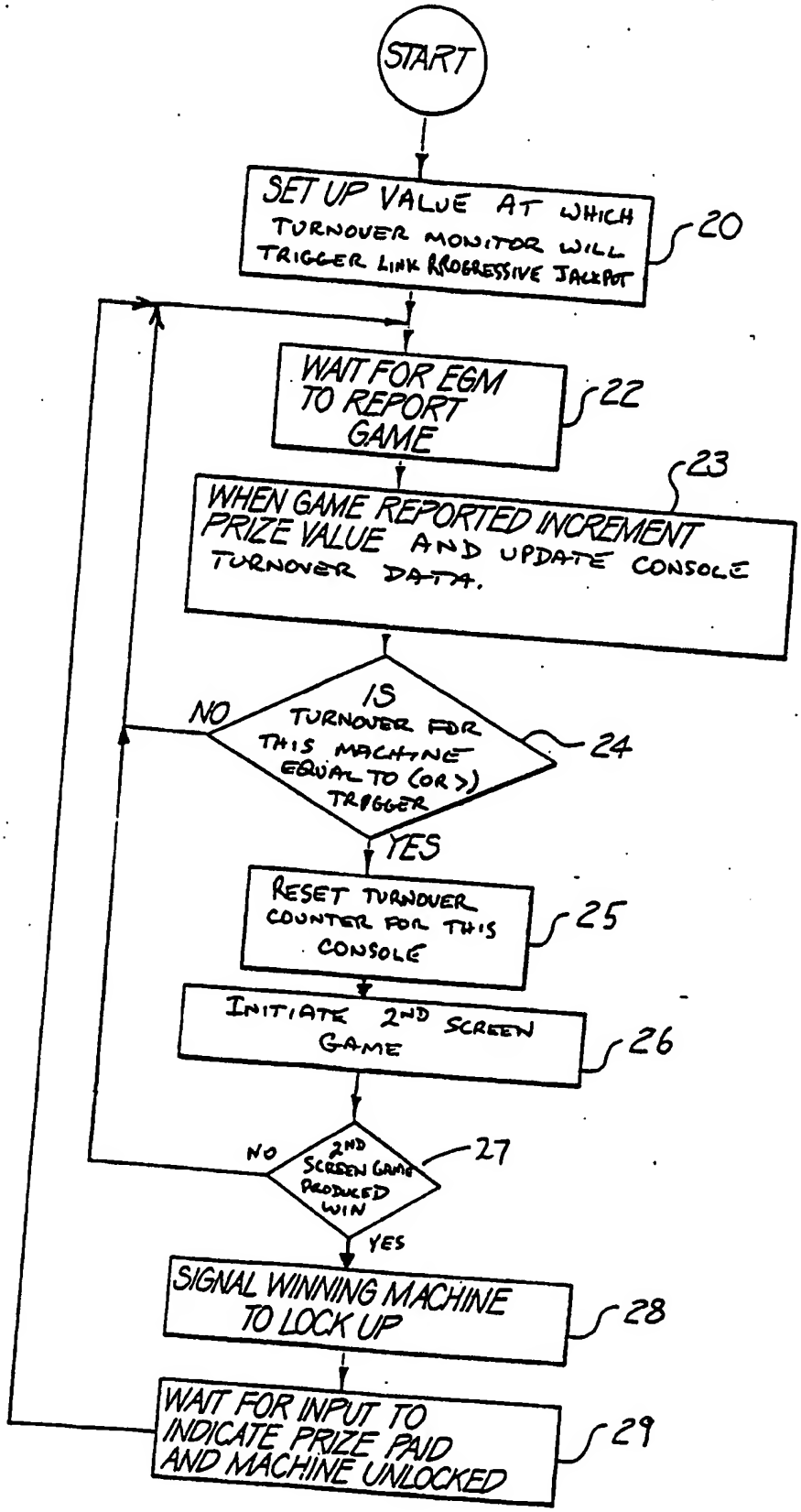
START
SET UP VALUE AT WHICH TURNOVER MONITOR WILL TRIGGER LINK PROGRESSIVE JACKPOT
20
WAIT FOR EGM TO REPORT GAME
22
23
WHEN GAME REPORTED INCREMENT PRIZE VALUE AND UPDATE CONSOLE TURNOVER DATA.
IS TURNOVER FOR THIS MACHINE EQUAL TO (OR >) TRIGGER
NO
24
YES
RESET TURNOVER COUNTER FOR THIS CONSOLE
25
INITIATE 2ND SCREEN GAME
26
NO
2ND SCREEN GAME PRODUCED WIN
27
YES
SIGNAL WINNING MACHINE TO LOCK UP
28
WAIT FOR INPUT TO INDICATE PRIZE PAID AND MACHINE UNLOCKED
29

FIG. 2

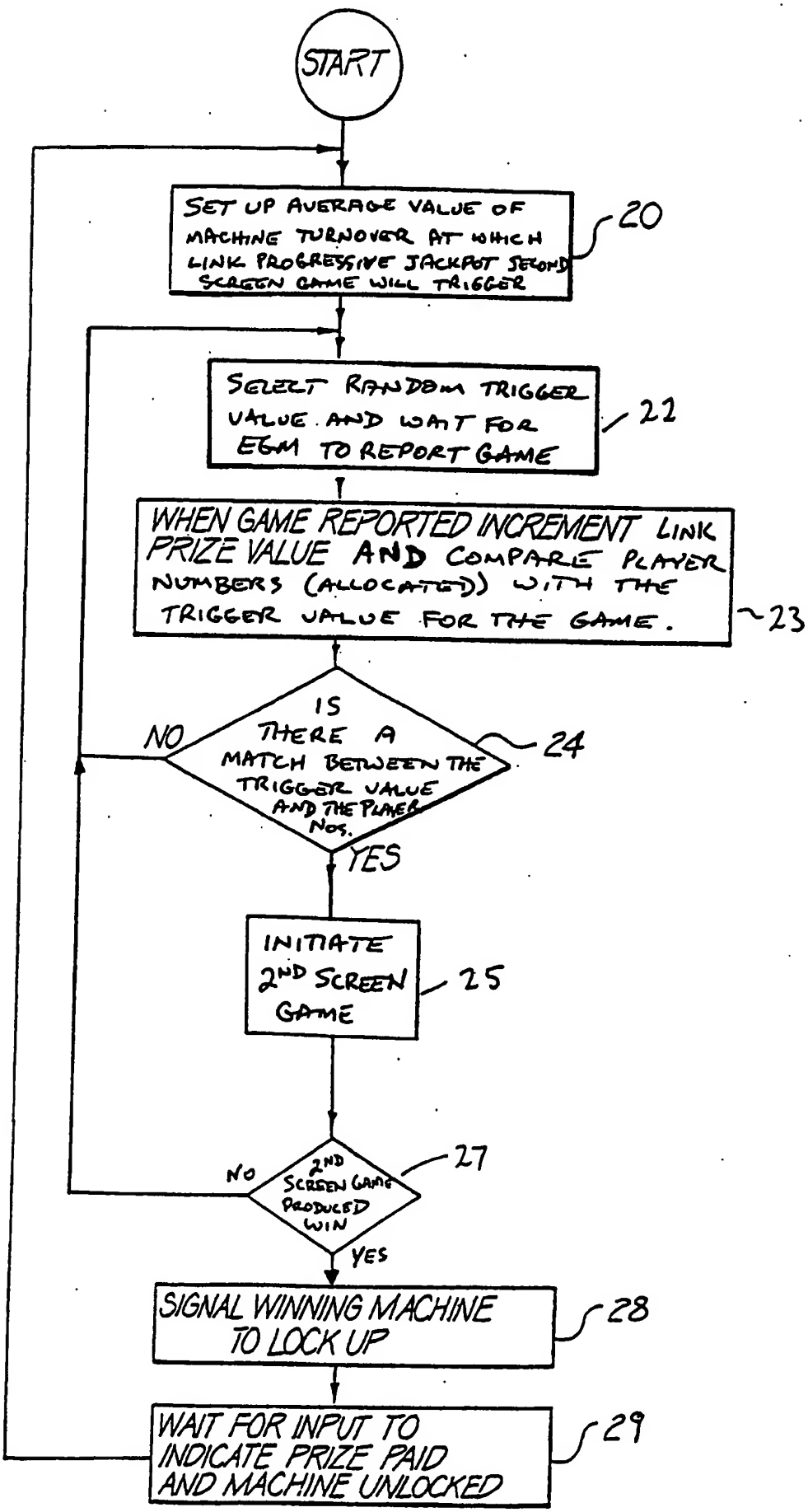
START
SET UP AVERAGE VALUE OF MACHINE TURNOVER AT WHICH LINK PROGRESSIVE JACKPOT SECOND SCREEN GAME WILL TRIGGER
20
SELECT RANDOM TRIGGER VALUE AND WAIT FOR EGM TO REPORT GAME
22
WHEN GAME REPORTED INCREMENT LINK PRIZE VALUE AND COMPARE PLAYER NUMBERS (ALLOCATED) WITH THE TRIGGER VALUE FOR THE GAME.
23
IS THERE A MATCH BETWEEN THE TRIGGER VALUE AND THE PLAYER NOS.
24
NO
YES
INITIATE 2ND SCREEN GAME
25
2ND SCREEN GAME PRODUCED WIN
27
NO
YES
SIGNAL WINNING MACHINE TO LOCK UP
28
WAIT FOR INPUT TO INDICATE PRIZE PAID AND MACHINE UNLOCKED
29

FIG 2

20	11	11	3	7
12	10	18	13	22
9	12	13	24	9

Figure 3